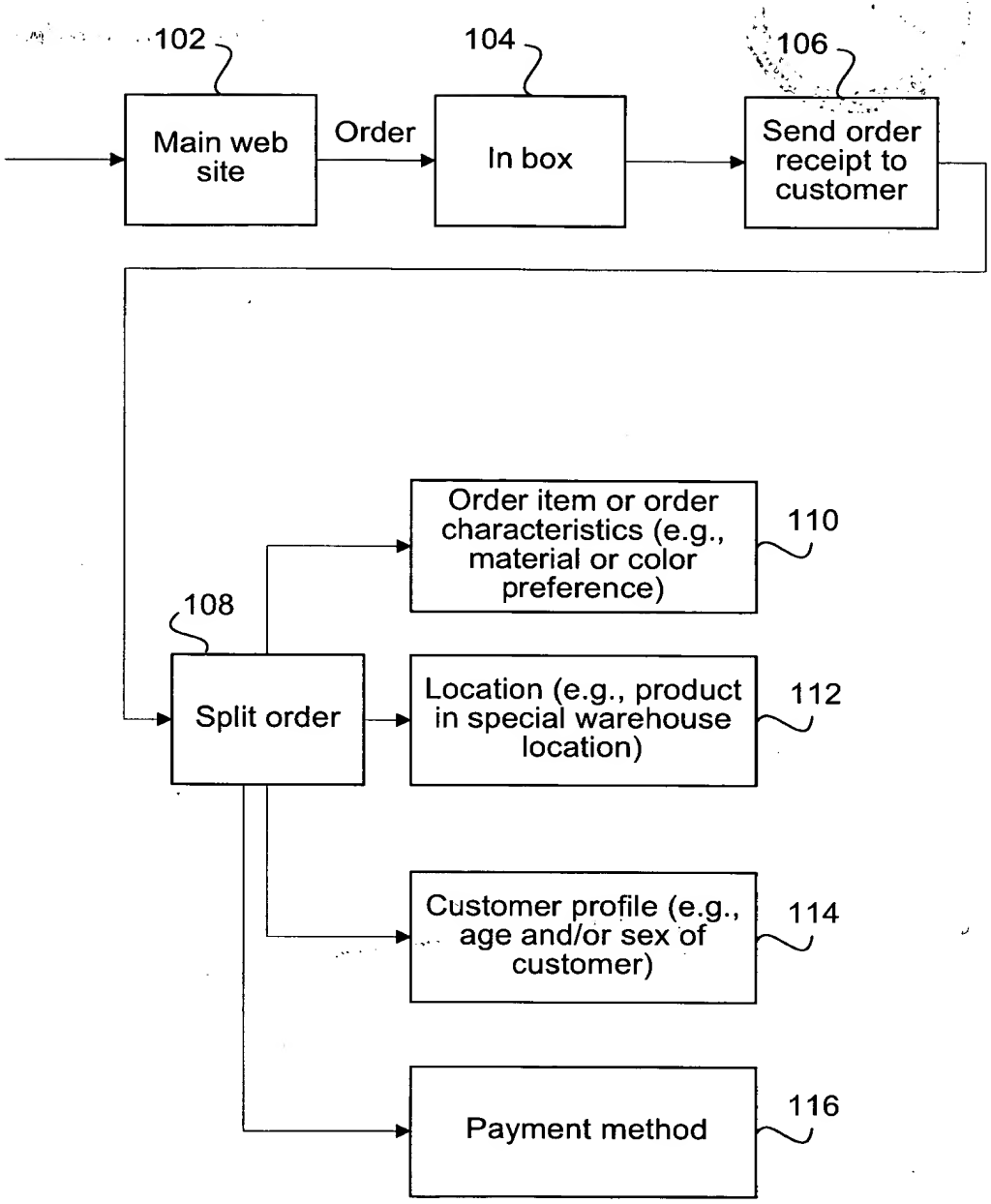
102
Main web site
Order
104
In box
106
Send order receipt to customer
108
Split order
Order item or order characteristics (e.g., material or color preference)
110
Location (e.g., product in special warehouse location)
112
Customer profile (e.g., age and/or sex of customer)
114
Payment method
116

FIG. 1

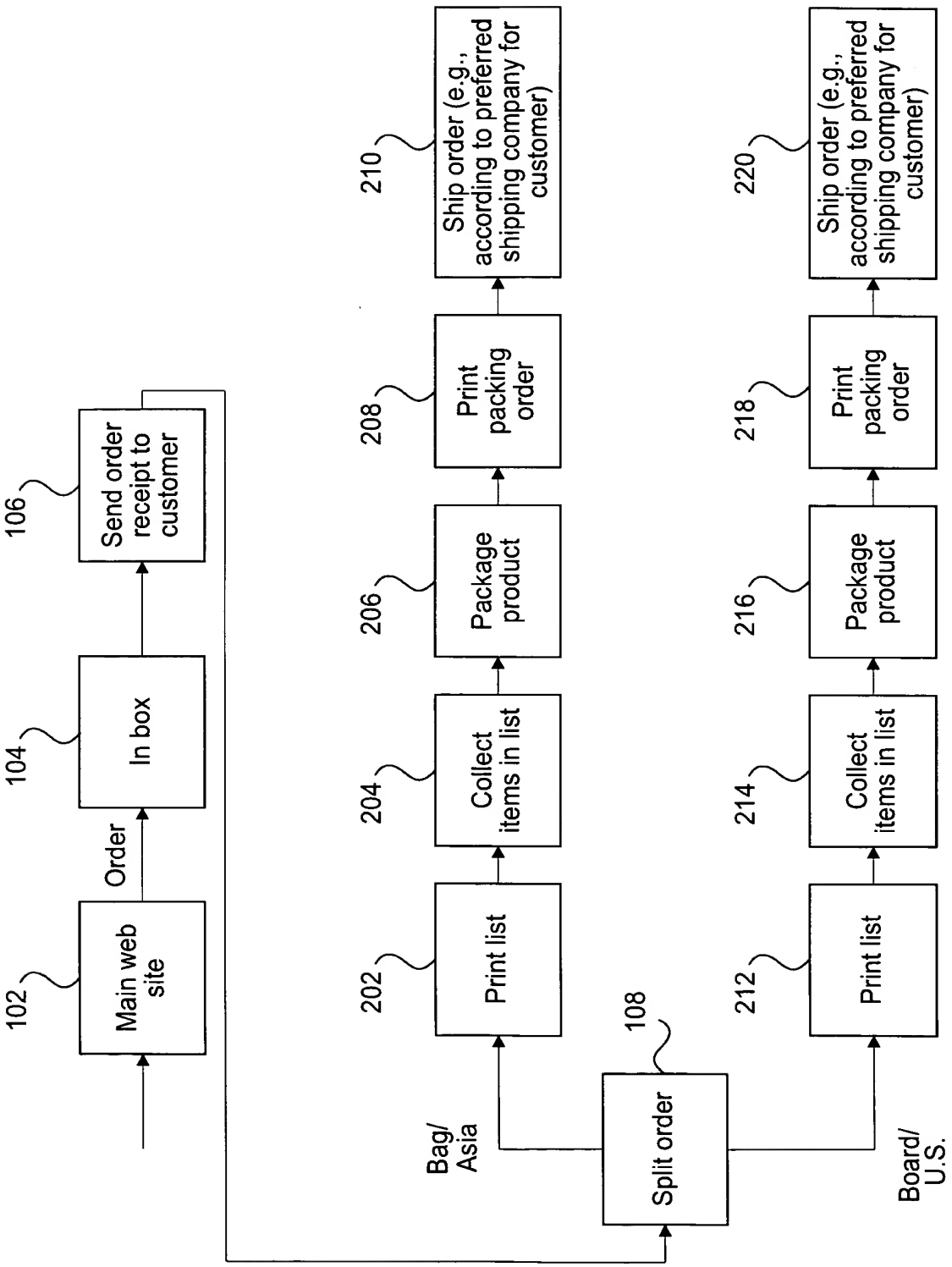
102
Main web site
Order
104
In box
106
Send order receipt to customer
108
Split order
Bag/ Asia
202
Print list
204
Collect items in list
206
Package product
208
Print packing order
210
Ship order (e.g., according to preferred shipping company for customer)
Board/ U.S.
212
Print list
214
Collect items in list
216
Package product
218
Print packing order
220
Ship order (e.g., according to preferred shipping company for customer)

FIG. 2

304 302

Order position	Field name
0	Name
1	Address
2	Credit card type
3	Credit card #
4	Item1
5	Quantity1
6	Item1 price
7	Total item1 price
8	Item2
9	Quantity2
10	Item2 price
11	Total item2 price

FIG. 3A

306 308

Global information	
	Order number
	Order net amount
	Order client ID
	Name
	Address
	Credit card type
	Credit card #
	Card expiration date

312 310

Order position	Field name
1	Item1
2	Quantity1
3	Item1 price
4	Total item1 price
5	Item2
6	Quantity2
7	Item2 price
8	Total item2 price

FIG. 3B

Now we see the order as it would appear in the Process Manager:

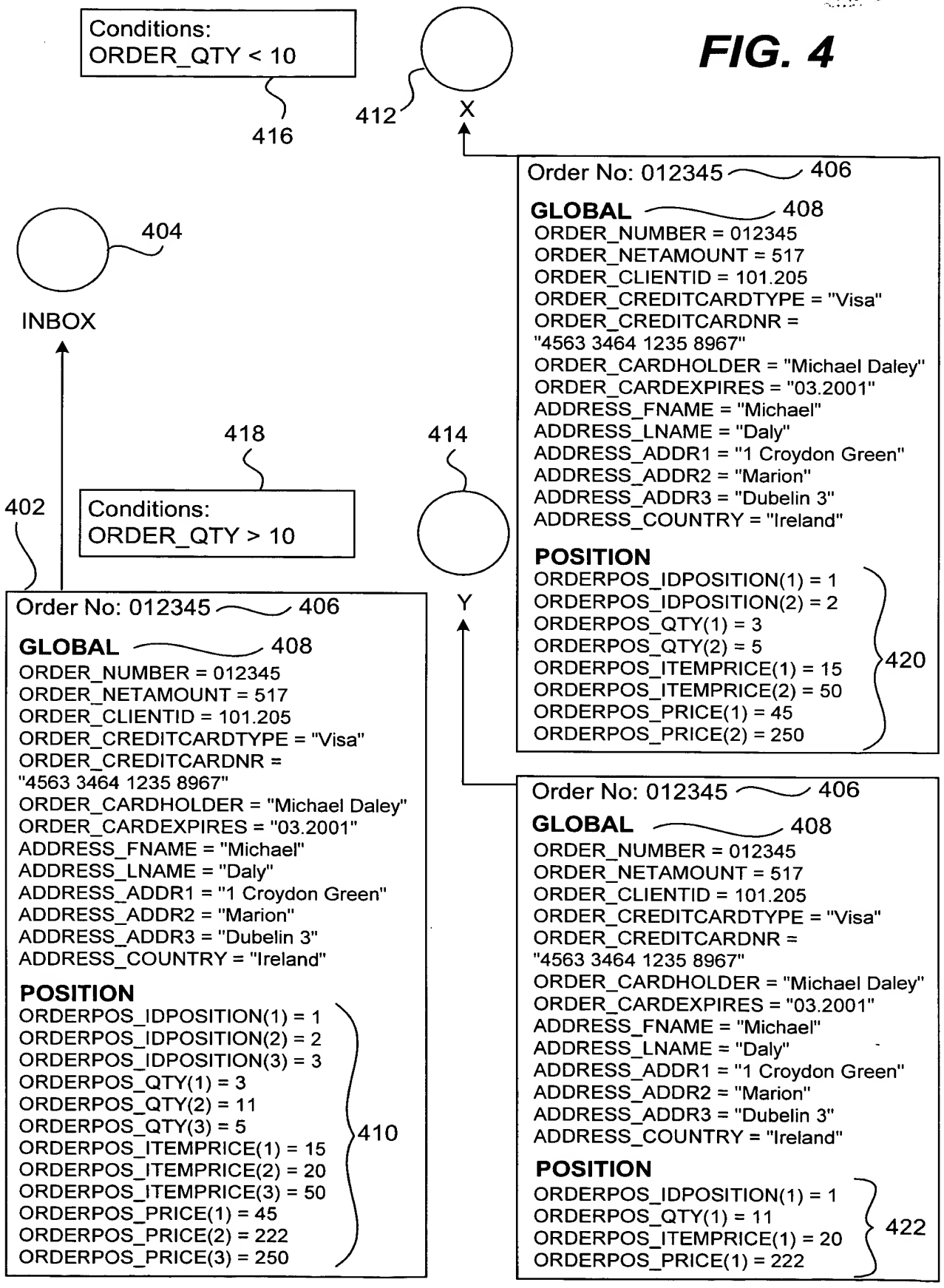

FIG. 4

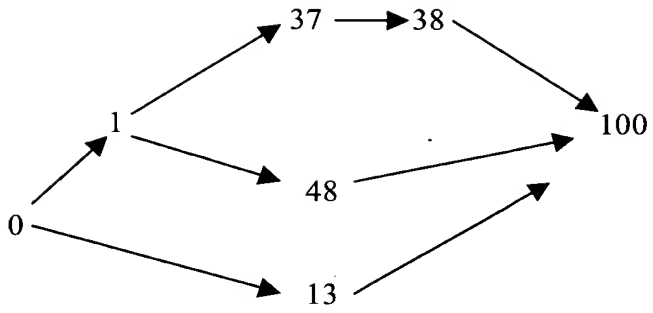
37
38
1
100
48
0
13

FIG. 5

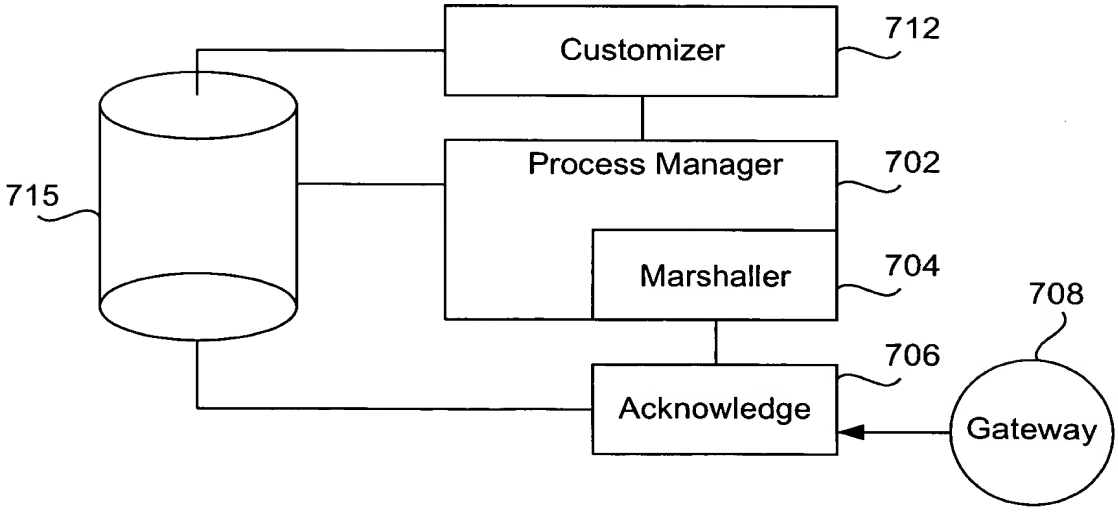
Customizer
712
Process Manager
702
715
Marshaller
704
708
706
Acknowledge
Gateway

FIG. 7

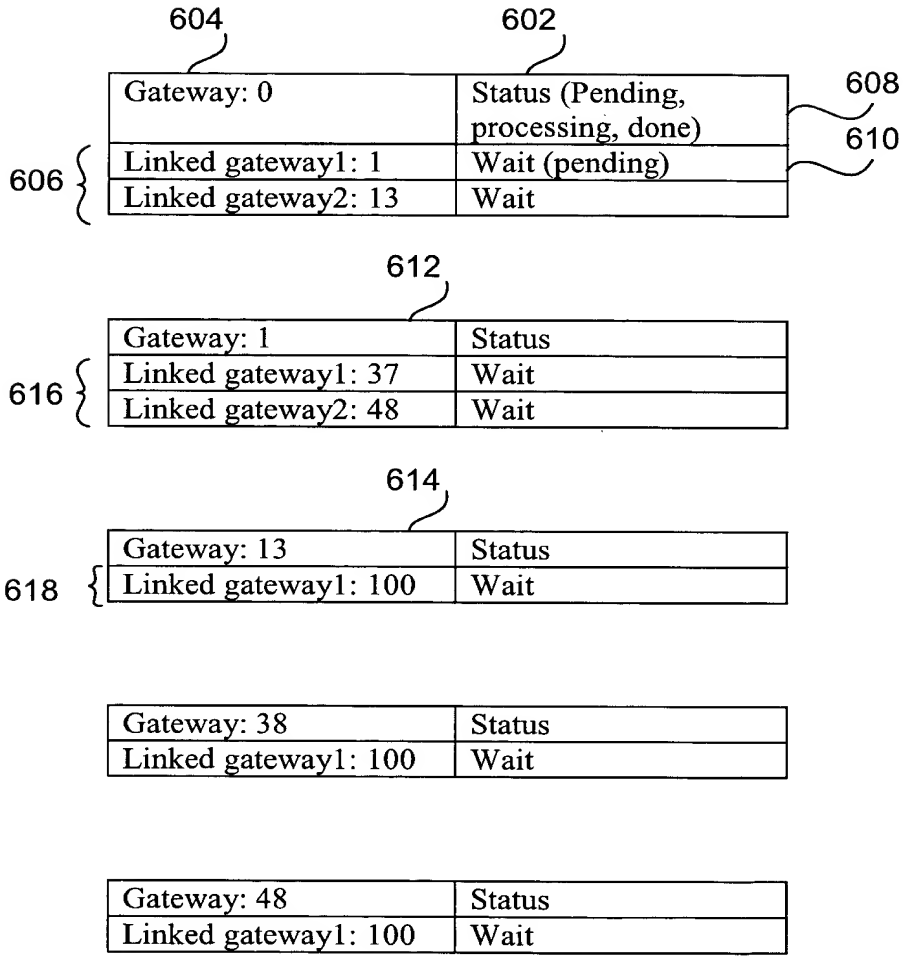
604
602
Gateway: 0
Status (Pending, processing, done)
608
610
606
Linked gateway1: 1
Wait (pending)
Linked gateway2: 13
Wait
612
Gateway: 1
Status
616
Linked gateway1: 37
Wait
Linked gateway2: 48
Wait
614
Gateway: 13
Status
618
Linked gateway1: 100
Wait
Gateway: 38
Status
Linked gateway1: 100
Wait
Gateway: 48
Status
Linked gateway1: 100
Wait

FIG. 6

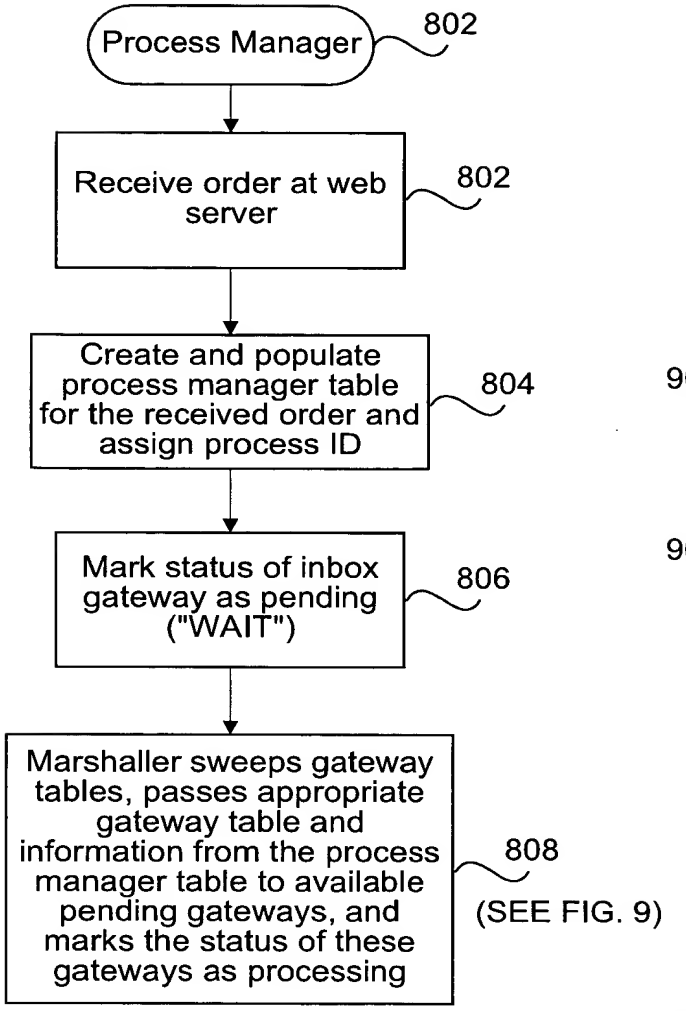
Process Manager
802
Receive order at web server
802
Create and populate process manager table for the received order and assign process ID
804
Mark status of inbox gateway as pending ("WAIT")
806
Marshaller sweeps gateway tables, passes appropriate gateway table and information from the process manager table to available pending gateways, and marks the status of these gateways as processing
808
(SEE FIG. 9)

FIG. 8

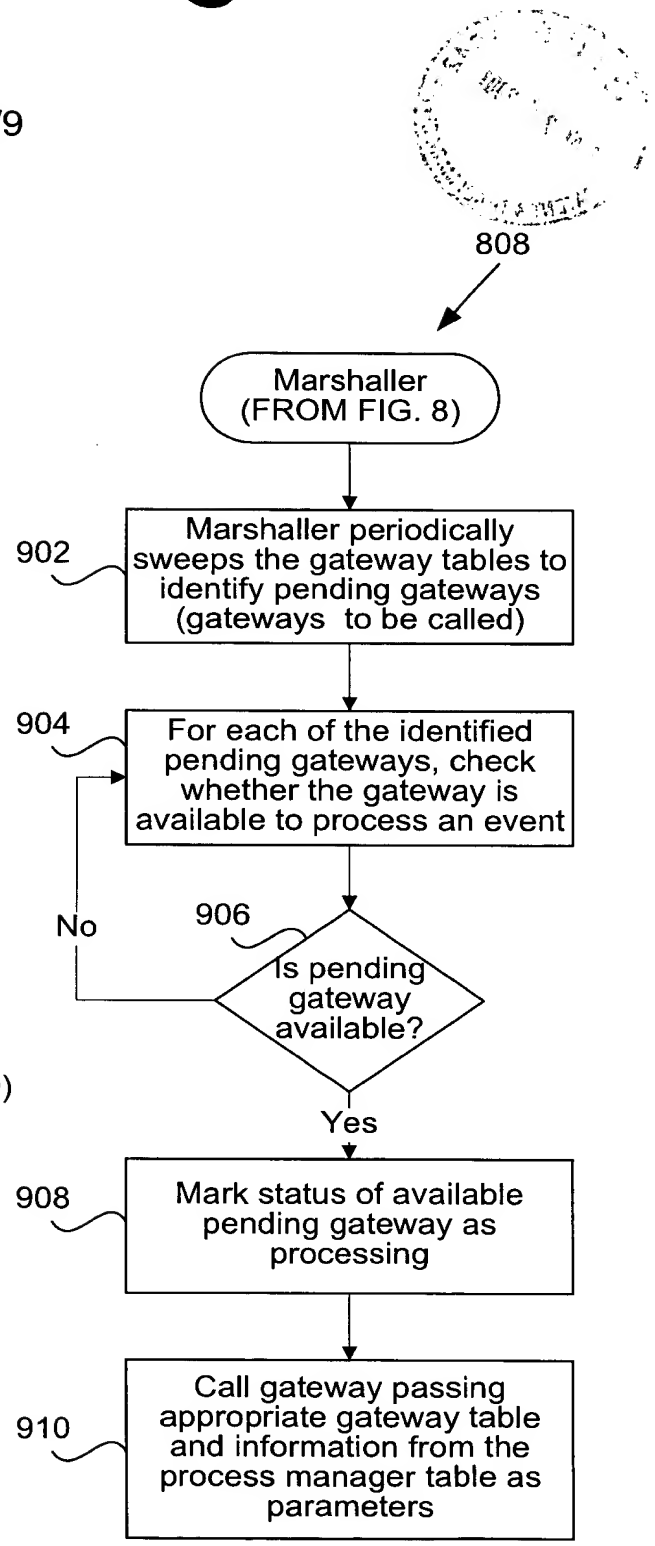
808
Marshaller (FROM FIG. 8)
902
Marshaller periodically sweeps the gateway tables to identify pending gateways (gateways to be called)
904
For each of the identified pending gateways, check whether the gateway is available to process an event
906
Is pending gateway available?
No
Yes
908
Mark status of available pending gateway as processing
910
Call gateway passing appropriate gateway table and information from the process manager table as parameters

FIG. 9

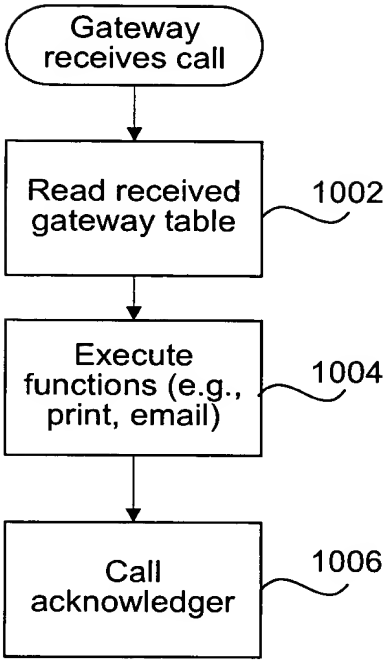
Gateway receives call
Read received gateway table
1002
Execute functions (e.g., print, email)
1004
Call acknowledger
1006

FIG. 10

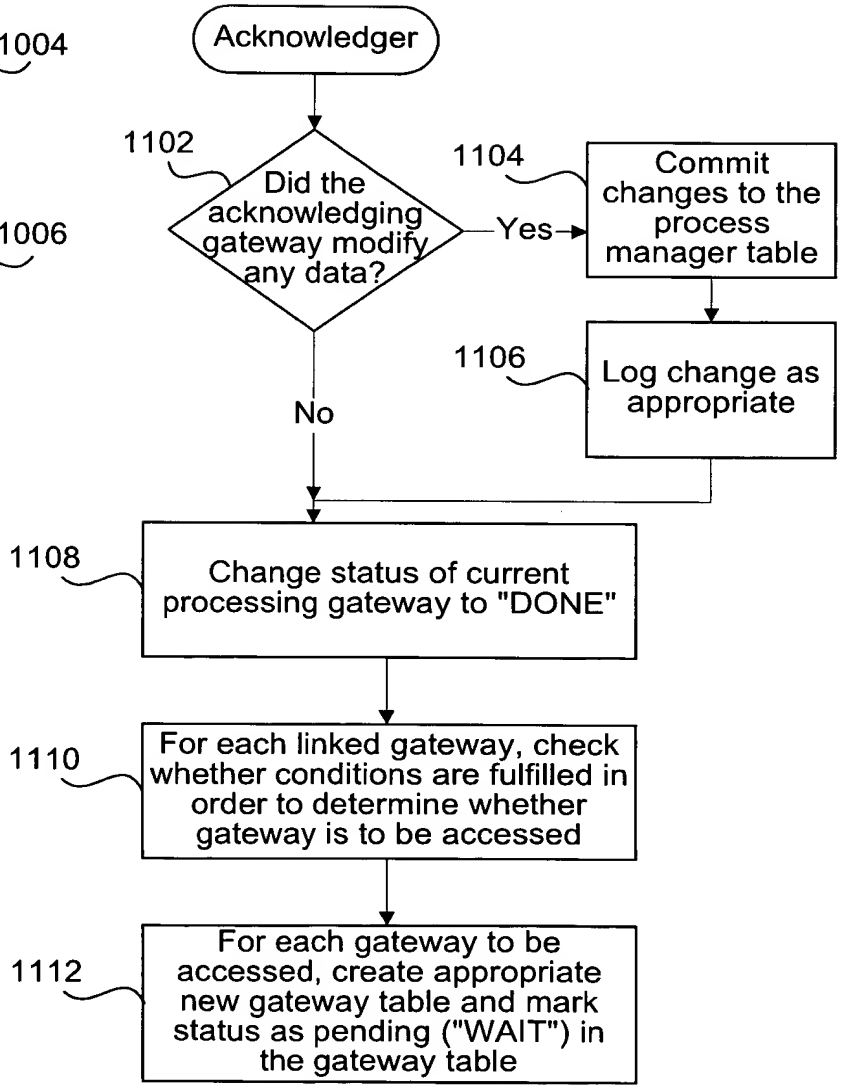
Acknowledger
1102
Did the acknowledging gateway modify any data?
Yes
1104
Commit changes to the process manager table
1106
Log change as appropriate
No
1108
Change status of current processing gateway to "DONE"
1110
For each linked gateway, check whether conditions are fulfilled in order to determine whether gateway is to be accessed
1112
For each gateway to be accessed, create appropriate new gateway table and mark status as pending ("WAIT") in the gateway table

FIG. 11

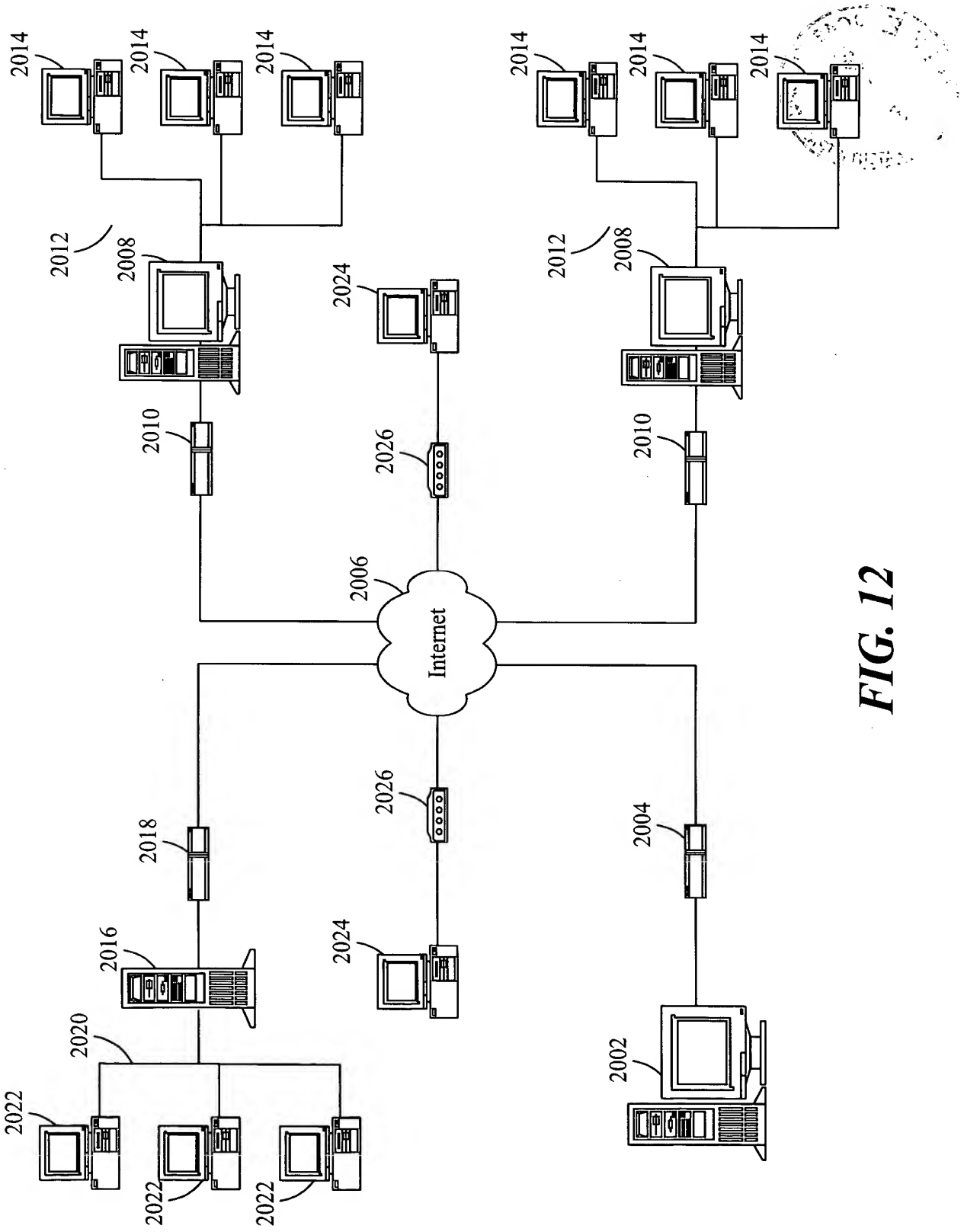
2014
2014
2014
2012
2008
2024
2010
2026
2006
Internet
2018
2016
2020
2022
2022
2022
2026
2024
2004
2002
2014
2014
2014
2012
2008
2010

FIG. 12